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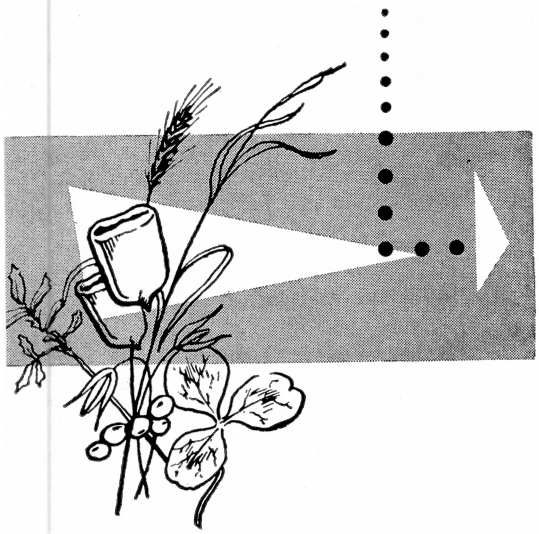

Recommended Crop Varieties for 1956

by I. J. Johnson and W. H. Bragonier

Using improved crop varieties is one of the best ways of getting the most for your money. Here are the crop varieties recommended for 1956. Each is backed by long and painstaking experiments and research.

EACH YEAR at this time, we summarize the results of crop variety trials. On the basis of these trials, new varieties are recommended for use in Iowa, or recommendations of earlier years are confirmed. This is also the time when many farmers start making definite plans on specific crop varieties to be grown this year. Your choice can play an important part in the success of your farm business.

Extensive trials with grain and forage crops show wide differences in performance among the many varieties now available. It may be unwise to choose a variety on the basis of only 1 or 2 years of tests. So many new varieties can't safely be recommended until they have been tested for enough years in different areas of the state. This way we can be reasonably sure of their performance under varying conditions. Complete reports of the crop variety trials are available from your county extension director or from the Publications Distribution Room at Iowa State College.

The crop varieties listed as recommended are eligible for production as certified seed. Many growers in your community as well as seed companies have certified seed for sale. You can obtain a list of certified seed growers from your county extension director.

In addition to choosing the best varieties to meet your needs, it's important to be sure you have high-quality seed. It pays to carefully examine the seed you buy to see that it's properly labeled, that it has high purity and germination and is free from noxious and other weed seeds. There are many seed dealers in Iowa who handle high-quality seed.

Though the use of good seed of recommended crop varieties is an important part of good farming—and adds little to cost—their use alone may not produce top yields. Other recommended crop and soil management practices should be followed, too. A combination of good practices works better than any one alone.

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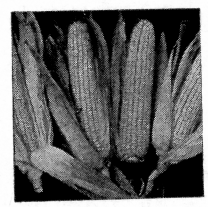


Corn

A large number of corn hybrids are available from seed companies and farmer-seedsmen. We can't list hybrids from all the commercial companies, because not all companies enter their hybrids in the Iowa Corn Yield Test. Farmer experiences and results from trials have shown that most hybrids sold under private pedigrees are well adapted and give excellent performance in Iowa. Sales representatives can give you information on their new and improved hybrids.

The recommendations made in this article have been jointly prepared by the project leaders in agronomy (farm crops) and in botany and plant pathology. These recommendations have been reviewed by members of the Iowa Seed Council, including representatives from the Iowa Seed Dealers Association, the Iowa Crop Improvement Association and the Iowa Department of Agriculture.

The hybrids listed below are those developed in the cooperative corn improvement program conducted by the Iowa Agricultural Experiment Station and the USDA. These are some of the hybrids which have met the certification standards of the Iowa Crop Improvement Association in the areas of the state indicated.

Dent Corn

Hybrids for northern Iowa:

Iowa hybrids 4297, 4316, 4417, 4470, 4483, 4542, 4558 and 4630.

Hybrids for north-central Iowa:

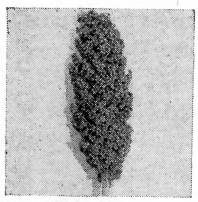
Iowa hybrids 4249, 4297, 4298, 4316, 4376, 4397, 4412, 4418, 4450, 4470, 4570, 4575 and 4576.

Hybrids for south-central Iowa:

AES 801; Iowa hybrids 4298, 4517, 4565; Ohio C-92; US 13.

Popcorn

Yellow—Iopop 6, 8 and P-32, P-202.
White—Iopop 5 and 7.



Sorghums

There has been considerable interest in sorghums for grain production in Iowa during the past 2 years. Sorghum seed is similar to shelled corn in feeding value. Grain sorghum yields are relatively better than corn under drouth and high-temperature conditions —but are generally lower than corn when rainfall is adequate for good corn production. Trials to compare sorghum varieties have been conducted for only 2 years. From these limited results, the following varieties are considered acceptable.

Sorghums for Grain:

Martin, Midland and *Redbine 60*—For late May and early June planting in central and southern Iowa. Red-seeded and similar in height and maturity. Satisfactory in seed yield and quality.

Combine Kaffir 60—White-seeded but similar to above varieties in maturity when planted at the same date. Yields well under favorable conditions, but grain quality may be adversely affected by unfavorable fall weather.

Norghum—Early, tall, red-seeded variety with good yielding ability but somewhat susceptible to lodging. For early planting (late May and early June) in northern Iowa and late planting (late June) in central and southern Iowa.

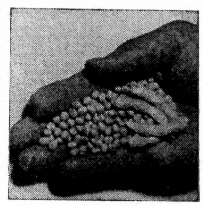
Reliance—Early-maturing, red-seeded variety, similar in growth habit to Norghum, but better in grain quality and lodging resistance. Satisfactory in yield. Planting dates, same as for Norghum.

Sorghums for Forage and Silage:

Norkan, Axtell, Rox Orange and *Waconia Orange*—Good yielding, palatable types for early planting (late May) in northern Iowa and late planting (late June) in central and southern Iowa.

Rancher—Black Amber type with low prussic acid content. For late planting in northern Iowa.

Atlas—High-yielding, tall, lodging-resistant, late variety for early planting in central and southern Iowa.



Soybeans

It's important to choose a variety of soybeans that uses the full growing season but reaches maturity before a killing frost. The varieties listed below do this when planted at the normal dates in the areas indicated.

Soybeans are often used to replace crops lost from flooding, hail or other reasons. If this need arises, early maturing varieties for your area may be planted at later than normal dates and still produce a fair crop. Write for special recommendations.

Northern Iowa:

Chippewa—A new, high-yielding variety which is about 1 week earlier in maturity than Blackhawk but compares favorably with it in all other characteristics. In comparison with Ottawa Mandarin, Chippewa yields about 5 bushels higher, is 3 to 4 days later in maturity, 6 inches taller and 1 percent higher in oil content.

Blackhawk—Early, medium-tall, lodging resistant and high in oil and yield.

Hawkeye—For western and southernmost counties of northern Iowa. High yield, tall and lodging resistant.

North-central Iowa:

Hawkeye—Most widely grown variety in the northern half of the state. Matures 3 days later than Harosoy and is similar in growth habit, appearance and performance.

South-central Iowa:

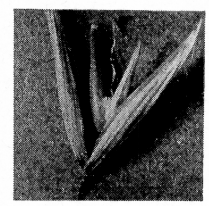
Adams—Popular variety with high yield, tall; more lodging resistant and a few days earlier than Lincoln.

Lincoln—High yield, tall; may lodge somewhat when growth is heavy.

Southern Iowa:

Adams and *Lincoln*.

Clark—A new, high-yielding variety. About 1 week later than Lincoln, and 3 to 4 bushels higher in yield; stands well.



Small Grains

Oat Varieties

The 1955 growing season was quite favorable for oats—with the exception of northwest Iowa where insufficient moisture caused short growth, though yields were still good. Oats headed about 10 days early because of above-normal spring temperatures. But cooler temperatures after heading left a longer period for the grain to fill. Test weight was exceptionally high. Crown rust was reported near buckthorn bushes, but it did little damage because the crop was early. There was some stem rust throughout the state, but it occurred too late to cause much loss. Septoria and red leaf diseases also were present but didn't cause much loss in

yield. All in all, 1955 was a good year for oats in Iowa.

None of the available oat varieties is entirely satisfactory in all respects—including resistance to all diseases. A common practice on farms with a large oat acreage is to plant two or three varieties. This spreads the date of harvest and reduces the risk of loss from any one disease.

The following oat varieties are recommended for growing in 1956. They are listed in alphabetical order in each maturity group.

Early Maturing:

Bonham—A pink, plump-kerneled variety; has the highest yield of the three early varieties in Iowa trials, and also weighs about 1 pound more per bushel. In the northern section, it has lodged more than Cherokee or Nemaha. Susceptible to stem rust race 7 and Septoria disease.

Cherokee—Very similar to Bonham in disease resistance and plant characteristics; has the lowest yield record of the three early varieties during the last 4-year period.

Nemaha—Similar to Cherokee and Bonham in plant characteristics and disease resistance. Has yielded from 1 to 4 bushels per acre more than Cherokee.

Midseason Maturing:

Andrew—A high-yielding variety adapted to all parts of the state. Straw is not as strong as Clintland. Resistant to race 7 of stem rust, moderately resistant to crown rust but susceptible to Septoria disease.

Clarion—A new midseason variety which produces strong straw and high test weight grain. Has yielded relatively higher in southern than in northern Iowa. Resistant to race 7 of stem rust, moderately resistant to prevalent races of crown rust, but susceptible to Septoria disease.

Clintland—Essentially Clinton with resistance to race 202 of crown rust. It is susceptible to race 7 of stem rust, but resistant to Septoria disease. Clintland has yellow, medium-sized kernels and stiff straw.

Mo. 0-205—One of the outstanding varieties in the yield trials and adapted to all areas of the state. Has moderate straw strength and small grey-colored kernels with a low hull percentage. Its small kernel size makes this variety undesirable for commercial milling. Resistant to race 7 of stem rust and race 202 of crown rust. Moderately resistant to Septoria disease.

Late Maturing:

Ajax—A tall, though weak-strawed, variety that has produced high yields in all sections of the state. Kernels are long and slender, low in test weight. Resistant to race 7 of stem rust and field tolerant to race 202 of crown rust. Moderately resistant to Septoria disease.

Sauk—A new, late-maturing, medium stiff-strawed, high-yielding variety. Test weight varies from medium to light. Resistant to race 7 of stem rust and Septoria disease; moderately resistant to crown rust.

Barley Varieties

Most barley produced in Iowa is used as feed for livestock. Some varieties may bring premium prices as malting barley if care is taken in production and harvesting. Two varieties are recommended for 1956.

Kindred (malting type)—Also called "L" barley; has plump white grain desired for malting; good yielding, six-rowed, rough-awned, medium-maturing, weak-strawed. Resistant to stem rust and moderately resistant to bacterial blight and the root rots; susceptible to leaf rust, mildew, smut, scab, stripe and some strains of spot blotch.

Plains (feed type)—Has large white grain, is high yielding, six-rowed, smooth-awned, early maturing, short, stiff-strawed. Resistant to stem rust and drouth; susceptible to loose smut, leaf rust, spot blotch and bacterial blight.

Flax Varieties

Flax, like barley, is grown largely in the northwestern sections of the state. Flax is a good companion crop for forage seedings when weeds aren't a serious problem. Midseason-maturing varieties have given most consistent yields in Iowa.

Marine—Early-maturing variety that has yielded well. Resistant to wilt and rust; most tolerant to pasmo of commercial varieties available.

Redwood—High-yielding variety of midseason maturity, resistant to all prevalent races of rust, moderately wilt resistant, susceptible to pasmo.

Wheat Varieties

Winter wheat generally outyields spring-sown varieties and has given the most consistent performance in southern and southwestern sections and along the Missouri River bottomlands. Recommended winter wheat varieties are:

Comanche—Moderately high yielding, bearded, early-maturing with short, medium-stiff straw. Somewhat lacking in winterhardiness and recommended only for southern Iowa. Resistant to stem rust (except race 15-B) but susceptible to leaf rust and loose smut.

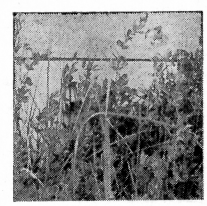
Iowin—High yielding, bearded, medium-late maturity, tall, weak straw with tendency to lodge on very fertile soils; recommended primarily for the upland or lighter soils of southern and central Iowa; has good resistance to leaf rust.

Minter—High yielding, bearded, midlate maturity, medium-tall, weak-strawed. Good winterhardiness, specially recommended for central and northern areas of the state.

Pawnee—Moderately high yielding, bearded, early maturing, stiff strawed, short; somewhat lacking in winterhardiness; recommended primarily for southern areas of state.

Spring-Sown Varieties:

Henry, Lee, Rushmore and *Selkirk* are high yielding and stand well. Henry has been the top yielder but produces a poor-quality flour and is recommended only for feed. Lee has the best resistance to leaf rust. Rushmore, an early-maturing beardless variety, appears well-suited for sowing in oat-wheat mixtures when grown with an oat variety of similar maturity. Selkirk has moderate resistance to race 15-B of stem rust.



Forage Crops

New varieties of forage crops developed during the past few years are now coming into commercial production. Most of these new varieties have been compared with the older standard varieties. Certified seed is now available and is recommended because it

assures the buyer of getting a genetically pure variety.

Alfalfa Varieties

Large quantities of high-quality alfalfa seed are produced in the western states under irrigation. Certified seed of recommended varieties produced in any area from foundation stocks maintained in the area of adaptation is entirely satisfactory for Iowa farmers.

Vernal—A new winterhardy and bacterial wilt-resistant variety. Performance tests have shown Vernal to be outstanding in forage production. Adapted for all parts of the state.

Ranger—The most widely grown bacterial wilt-resistant variety. Winterhardy, yields well and recommended for all parts of Iowa.

Buffalo—Bacterial wilt-resistant and slightly superior to Ranger in central and southern Iowa. Not recommended for northern Iowa.

Atlantic and *Narragansett*—High yielding and excellent for 2- and 3-year stands. Low level of bacterial wilt resistance. Seed supply is limited.

Grimm, Cossack and *Ladak*—Older winterhardy varieties, susceptible to bacterial wilt, but satisfactory for 2-year stands.

Northern Common—Strains grown continuously in Canada, North and South Dakota, Nebraska, Montana and in similar latitudes are satisfactory for 2-year stands. Kansas Common and Oklahoma Approved usually are sufficiently winterhardy for the southern half of Iowa.

Red Clover Varieties

Seed from known origin in the Corn Belt or similar latitudes in the United States and Canada is adapted to Iowa conditions. English and other European red clovers are *not* recommended.

Common—Seed from known origin in the Corn Belt and similar latitudes.

Dollard—A Canadian variety resistant to northern anthracnose. Best adapted in northern Iowa. Seed supply is limited.

Kenland—A new variety resistant to southern anthracnose. Forage yields average as high as for any variety. Seed supply now adequate.

LaSalle—A Canadian variety similar in adaptation to Dollard.

Midland—High-yielding, well-adapted variety originating from Corn Belt strains.

Sweetclover Varieties

For many years sweetclover has been the leading crop for legume green manure in seedings with oats or other grains. Stands should be plowed down either in late fall or in the spring in time for corn planting. Watch for weevil damage; resistant varieties are not available.

Hubam—Annual white. Not as high in yields of nitrogen and organic matter as biennial types, but may be plowed in the fall without danger of volunteer growth the following year.

Madrid—Biennial yellow. Produces excellent yields of nitrogen and organic matter in the first-year growth.

Ladino Clover

Ladino clover is a larger and much more productive variety than common white clover. Ladino is recommended in long-rotation pasture and in meadow mixtures except where moisture may be a limiting factor. It also is valuable for green manure when seeded with oats in mixtures with other legumes such as red clover, alfalfa and sweetclover. Though seed prices are higher than for other legumes, the seeds are very small. Adding ½ to 1 pound of seed in legume mixtures gives a good stand of Ladino.

Birdsfoot Trefoil

A deep-rooted, winterhardy perennial legume for use in permanent and long-rotation pastures. It's adapted to a wide range of soil conditions, but establishment often is slow. Birdsfoot trefoil grows well in mixtures with Kentucky bluegrass and orchardgrass.

Empire—Semi-prostrate growth habit, and recommended for pasture use. Seed produced in Iowa from New York Empire is equal in performance to that produced in the eastern states.

European—Imported broadleaf, upright types, not as winterhardy as Empire and must be managed carefully to persist under grazing.

Cascade, Granger, Mansfield, Parker and *Viking*—Varieties of the upright type developed by selection from European. These varieties are superior to Empire in hay yields. Seed supplies are limited.

Lespedeza

Korean lespedeza is useful for improving pastures in southern Iowa—especially soils that are too steep to be plowed.

Iowa 6—An early, wilt-resistant selection that produces high yields of forage and seed. Stands are maintained by profuse reseeding year after year.

Bromegrass

Generally, the "southern" varieties are best in forage and seed production. They are leafy, tall, good seed producers and establish vigorous stands.

Brome does best when grown with a legume, especially alfalfa. But stands depleted of legumes can be stepped up considerably in seed and forage production by applying nitrogen fertilizer (60 to 80 pounds of nitrogen per acre).

Recommended varieties — all similar in performance—are:

Fischer, Lincoln and *Achenbach*—Widely grown southern types, approximately equal in performance; tall, leafy and good seed producers under proper management.

Southland—A new variety similar in performance to the southern types.

Sudangrass

Because of its rapid, vigorous growth in hot, dry weather, sudangrass does well for summer pastures. It also has value as an emergency pasture or hay crop in adverse seasons.

Piper—Early, rapid in growth and recovery, disease resistant and high in yield. Low in prussic acid content.

Greenleaf—A new variety from Kansas. Late, leafy and disease resistant with juicy stems and sweet forage. Satisfactory in yield.